

AES comment to CEC Staff Report "Issues and Environmental Impacts Associated with Once-Through Cooling at California's Coastal Power Plants"

California Energy Commission Dockets Unit Attn: Docket No. 04-IEP-1G 1516 Ninth Street MS-4 Sacramento, CA 95814-5512 DOCKET 04-1EP-1G DATE \_\_\_\_\_\_\_RECD: JUL 2 0 2005

**Energy Commission Staff and Commissioners:** 

AES Southland appreciates the opportunity to comment on the Environmental Performance Report developed as part of the California Energy Commission's (CEC) 2005 Integrated Energy Policy Report. AES operates three coastal generating stations in southern California, including the AES Huntington Beach Generating Station, the AES Alamitos Generating Station, and the AES Redondo Beach Generating Station.

The following comments are in response to the CEC Staff Report entitled "Issues and Environmental Impacts Associated with Once-Through Cooling at California's Coastal Power Plants". The Staff Report contains many inaccuracies and AES Southland LLC could not support any major changes in state water policy as a result of this study.

### §316(b) Framework

In July 2004, the U.S. Environmental Protection Agency (EPA) published new regulations addressing entrainment and impingement at generating stations that utilize >50 million gallons per day of cooling water. These §316(b) Phase II regulations apply to all three AES facilities in southern California. Currently, AES is developing entrainment and impingement study plans to comply with these new regulations. While we disagree with the Staff Report that entrainment and impingement studies at AES Alamitos and AES Redondo Beach are inadequate, new studies are scheduled to begin in January 2006.

# **CEC Permitting Policy**

The Staff Report recommends the CEC adopt a policy such that future projects at coastal facilities using once-through cooling could only be permitted where alternative technologies are both environmentally undesirable and economically unsound. This policy effectively discourages modernization projects at coastal facilities that would otherwise replace older generating units with newer, more efficient ones.

#### Adequacy of Existing 316(a) and 316(b) Data

The Staff Report implies that entrainment data for the Alamitos and Redondo Beach facilities are either non-existent or inaccurate (see Table 1). Entrainment studies performed for these facilities were done with oversight from the Los Angeles Regional Water Quality Control Board (LARWQCB), the National Marine Fisheries Service, and the California Department of Fish and Game, and were done in conformance with published EPA guidelines. We do not agree that the entrainment estimates are "inaccurate". We also disagree that thermal impacts from the Alamitos and Redondo Beach Generating Stations were not completely assessed. As with the entrainment studies, the thermal impact studies were performed according to specifications published by the LARWQCB.



# Inaccurate Entrainment Impact/Mitigation Estimates

The Staff Report is inaccurate in suggesting there has been mitigation for entrainment impacts at the Huntington Beach Generating Station. In 2003 and 2004, a yearlong entrainment and impingement study was performed at the AES Huntington Beach Generating Station. The study was required as a Condition of Certification by the CEC for the modernization of Units 3 and 4 at Huntington Beach. The study design, implementation, and data analysis was performed with oversight from a technical working group, comprised of CEC staff, CEC consultants, the project applicant, the applicant's consultants, and state and federal resource agencies. The Final Report for that study was submitted to the CEC in April 2005.

As previously stated, there has been no required mitigation for entrainment impacts at Huntington Beach. Even so, the production foregone estimates in Table 1 are highly inaccurate. The Final Report for the Huntington Beach Entrainment and Impingement Study estimated areas of production foregone ranging from 29 to 1,105 acres, averaging 371 acres (MBC and Tenera 2005). These estimates were derived using the same methodologies used in other recent entrainment studies, including those at Morro Bay and Moss Landing, and were based on a conservative set of assumptions, including maximum cooling water flow and 100% through-plant mortality. However, the Staff Report estimates the affected area as 2,840 to 69,752 acres. The CEC Staff estimates are wrong, and are further applied to incorrectly estimate cumulative habitat production foregone (not habitat loss, as stated in the report) for all southern California coastal generating stations.

### Standardization of Impact Studies

CEC Staff claim that "Determining impacts is fundamentally a science issue, and should be independent of the regulation it serves..." We believe that impact studies should be designed to answer the appropriate questions. While a standardization of impact studies in California might make it easier for CEC Staff to determine cumulative impacts, the variety of cooling water intake systems, affected environments, and regulatory compliance requirements suggests that not all studies should be designed the same.

AES is committed to continuing compliance with §316(a) and §316(b) at all three Southland facilities. AES will examine a wide range of fish protection technologies, potential operational measures, and restoration measures to comply with the new regulations. Compliance schedules for the three generating stations were submitted to the Santa Ana and Los Angeles Regional Water Quality Control Boards in 2004.

Please contact me if you have any questions at (562) 493-7384.

Sincerely.

Steve Maghy Environmental Manager

**AES Southland LLC**